



FIRST HBP CURRICULUM WORKSHOP SERIES

UNDERSTANDING THE BRAIN: NEUROBIOLOGY FOR NON-SPECIALISTS

Human Brain Project
Education Programme

3-5 July 2017
Medical University Innsbruck, Austria

Application deadline: 29 May 2017

Scientific Programme

The aim of this interactive workshop is to provide practical insights into basic and translational neuroscience research for interested non-specialists. The topics addressed range from essential neuroanatomy and neurophysiology, over IPS cells, to networks and behaviour. Plasticity and modulation of networks and signal transmission under physiological (like learning and memory) and pathological situations (like addiction, epilepsy or neurodegeneration) will form an essential part.

Lectures and tutorials will be accompanied by lab visits, practical work and an open discussion round. Experts in functional neuroanatomy, neurobiochemistry, neuropharmacology and psychiatry from Medical University Innsbruck (Austria), the Allen Institute for Brain Science (USA) and the Human Brain Project (HBP) will be available on site.

This workshop is open to the whole student community and early post-docs upon application. Applications from young female investigators are highly encouraged.

Scientific Directors:

Christoph Schwarzer,
Alois Saria
Medical University
Innsbruck

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APPLICATION DEADLINE extended to
29 May 2017

Organisers:

Elisabeth Wintersteller,
Lisa-Marie Leichter
Medical University Innsbruck

Contact:

curriculum.edu@humanbrainproject.eu

For more information visit:

[https://education.humanbrainproject.eu/web/
1st-hbp-curriculum-neurobiology](https://education.humanbrainproject.eu/web/1st-hbp-curriculum-neurobiology)

Scientific programme schedule

as of 24 May 2017



Human Brain Project
Education Programme

Monday, 3 July

08:30 - 09:00

Registration

09:00 - 09:30

Welcome note and workshop introduction

**Christoph Schwarzer (MUI),
Alois Saria (MUI)**

09:30 - 10:30

The rodent brain atlas
tbc

10:30 - 12:00

The Allen Brain Atlas
Neuroanatomy - gene
expression

Terri Gilbert (AI)

12:00 - 13:00

Lunch break

13:00 - 16:30

Lab visits*

16:45 - 18:15

The Allen Brain Atlas
Neuroanatomy - connectivity

Terri Gilbert (AI)

18:15

Open Discussion

This workshop is open to the whole student community and early post-docs upon application. Applications from young female investigators are highly encouraged. **Application is required as space may be limited.** Applicants selected for participation will be informed within two weeks after the application deadline.

There is no registration fee. Seven travel grants will be available upon request (European students only). Accommodation can be provided for 30 students (first come, first served). This programme may be subject to change.

Note: The workshop is a supplement to the online course 'HBP Curriculum - Neurobiology for non-specialists'. It is recommended for workshop participants to attend the online course as a basis for the workshop. During the workshop, participants will have the possibility of taking an exam about the content of the HBP online course 'HBP Curriculum - Neurobiology for non-specialists'.

Contact:

curriculum.edu@humanbrainproject.eu

For more information and application visit:

<https://education.humanbrainproject.eu/web/1st-hbp-curriculum-neurobiology>

Tuesday, 4 July

09:00 - 10:00

Principles of
neuropharmacology

Sandra Santos Sierra (MUI)

10:00 - 11:00

Ion channels in diseases

Alexandra Koschak (LFU)

11:00 - 12:00

Induced pluripotent stem cells

Roxana Nat (MUI)

12:00 - 13:00

Lunch break

13:00 - 16:30

Lab visits*

16:45 - 17:45

Brain evolution: Reflections on
the human nature of cortical
circuits

Javier DeFelipe (UPM)

17:45 - 19:15

The Allen Brain Atlas: Cell
typing and visual coding

Terri Gilbert (AI)

Wednesday, 5 July

08:00 - 09:00

Modulation of synaptic
plasticity and neuronal network
activity

Uri Ashery (TAU)

09:00 - 10:30

The HBP Brain Simulation
Platform

Michele Migliore (CNR)

10:30 - 11:00

Coffee break

11:00 - 12:30

The human brain atlas as a part
of the HBP Neuroinformatics
Platform

Timo Dickscheid (Juelich)

* lab visit themes

- Addiction / Psychiatry

**Barbara Pinheiro (MUI),
Gerald Zernig (MUI)**

- Experimental EEG

Alexandra Agostinho (MUI)

- Behavioural Testing

Iwona Kmiec (MUI)

- Regeneration in the CNS

**Marta Cubero (LFU),
Sandra Rizzi (LFU),
Frank Edenhofer (LFU)**

- Neurodegeneration

Christoph Schwarzer (MUI)

- Comparative neuroanatomy

**Barbara Hausott (MUI),
Lars Klimaschewski (MUI)**

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the European Union



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UNIVERSITÄT
INNSBRUCK

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